

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent of:

HORMANN *et al.*

Patent. No.: 7,304,161 B2

Issued: December 4, 2007

For: **Diacylhydrazine Ligands for  
Modulating the Expression of  
Exogenous Genes in Mammalian  
Systems Via an Ecdysone Receptor  
Complex**

Confirmation No.: 1883

Art Unit: 1621

Examiner: Davis, Brian J.

Atty. Docket: 2584.0460001/RWE/MFG

**Request for Certificate of Correction  
Under 37 C.F.R. § 1.323 For Applicant's Mistake**

*Attn: Certificate of Correction Branch*

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

Sir:

It is hereby requested that a Certificate of Correction under 37 C.F.R. § 1.323 be issued for the above-captioned United States Patent. This Certificate of Correction is being requested due to mistakes which appear in the printed patent. The mistakes made by Patentees are of a clerical or typographical nature, or of a minor character. Patentees submit that correction of these errors does not introduce new matter.

Specifically, the printed patent contains the following errors for which a Certificate of Correction is respectfully requested:

Column 104, line 19, cancel the text beginning with "5. The compound of claim 4" to and ending "y) 3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-di methyl-pent-4-enyl)-N'-(3-

methoxy-2-methyl-benzoyl)-hydrazide." in column 106, line 11, and insert the following claim:

5. A compound selected from the group consisting of:

- a) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-hydroxymethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- b) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-[3-(tert-butyl-dimethylsilanyloxymethyl)-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl]-hydrazide,
- c) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid,
- d) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid methyl ester,
- e) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-semicarbazidomethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- f) Phenyl-carbamic acid 7-[N'-tert-butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl ester,
- g) 3,5-Dimethyl-benzoic acid N'-[3-(2-amino-ethyl)-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl]-N-tert-butyl-hydrazide,

- h) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid pentafluorophenyl ester,
- i) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid methylamide,
- j) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-formyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- k) Toluene-4-sulfonic acid 7-[N'-tert-butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl ester,
- l) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-[3-(hydroxyimino-methyl)-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl]-hydrazide,
- m) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-cyanomethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- n) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(5-methyl-3-methylsulfanylmethyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- o) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-methanesulfonylmethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
- p) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-fluoromethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,

- q) 3,5-Dimethyl-benzoic acid N-(1-tert-butyl-heptyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide,
- r) 3,5-Dimethyl-benzoic acid N-(1-tert-butyl-heptyl)-N'-(4-ethyl-benzoyl)-hydrazide,
- s) 3,5-Dimethoxy-4-methyl-benzoic acid-N-(1-tert-butyl-heptyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide,
- t) 3,5-Dimethoxy-4-methyl-benzoic acid-N-(1-tert-butyl-heptyl)-N'-(4-ethyl-benzoyl)-hydrazide,
- u) 2-Methoxy-nicotinic acid N-(1-tert-butyl-heptyl)-N'-(4-ethyl-benzoyl)-hydrazide,
- v) 3,5-Dimethyl-benzoic acid N-(1-tert-butyl-3,4,4-trimethyl-pent-2-enyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide,
- w) 3,5-Dimethyl-benzoic acid N-(1-tert-butyl-2-cyano-vinyl)-N'-(3-methoxy-2-methylbenzoyl)-hydrazide,
- x) 3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-dimethyl-pentyl)-N'-(3-methoxy-2-methylbenzoyl)-hydrazide, and
- y) 3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-dimethyl-pent-4-enyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide.

### ***Remarks***

At present, claim 5 does not properly depend from claim 4 because 3,5-dimethylbenzoic acid N-(1-*tert*-butyl-2-cyano-vinyl)-N'-(3-methoxy-2-methylbenzoyl)-hydrazide (at letter "w") represents a compound wherein R<sup>3</sup> is *tert*-butyl in claim 5, and R<sup>3</sup> cannot be *tert*-butyl in claim 4. The above-noted corrections simply make claim 5 an independent claim and simultaneously correct minor typographical errors in the chemical names of certain compounds. Specifically, a hyphen was added after "7" in the chemical name at h) to give "7-[N'-*tert*-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydrobenzo[1,4]dioxine-2-carboxylic acid pentafluorophenyl ester" and the space between "di" and "methyl" in the chemical name at y) was removed to give "3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-dimethyl-pent-4-enyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide." Thus, the above-noted corrections correct obvious mistakes of minor character and do not involve such changes in the patent as would constitute new matter or would require reexamination.

Upon granting of this Request, the patent will have two independent claims. Thus, no additional fees for the presentation of independent claims in excess of three are due to be paid.

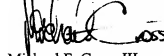
A completed Form PTO/SB/44 accompanies this request, with the above-noted corrections printed thereon. Accordingly, a Certificate of Correction is believed proper and issuance thereof is respectfully requested.

This request is accompanied by payment of the fee set forth in 37 C.F.R. § 1.20(a). Fee payment is provided through online credit card payment. The Commissioner is hereby

authorized to charge any fee deficiency, or credit any overpayment, to our Deposit Account  
No. 19-0036.

Respectfully submitted,

STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.

A handwritten signature in black ink, appearing to read "Michael F. Gross III", is written over the printed name.

Michael F. Gross III  
Agent for Patentees  
Registration No. 64,974

Date: December 2, 2009

1100 New York Avenue, N.W.  
Washington, D.C. 20005-3934  
(202) 371-2600

**UNITED STATES PATENT AND TRADEMARK OFFICE  
CERTIFICATE OF CORRECTION**

Page 1 of 3

PATENT NO: 7,304,161 B2

DATED: December 4, 2007

INVENTOR(S): HORMANN *et al.*

It is certified that error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below.

Column 104, line 19, cancel the text beginning with "5. The compound of claim 4" to and ending "y) 3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-di methyl-pent-4-enyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide." in column 106, line 11, and insert the following claim:

5. A compound selected from the group consisting of:
- a) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-hydroxymethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,
  - b) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-[3-(tert-butyl-dimethyl-silanyloxymethyl)-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl]-hydrazide,
  - c) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid,
  - d) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid methyl ester,
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MAILING ADDRESS OF SENDER (Please do not use customer number below):

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Atty. Dkt. No. 2584.0460001/RWE/MFG

This collection of information is required by 37 CFR 1.322, 1.323 and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you are required to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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- f) Phenyl-carbamic acid 7-[N'-tert-butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxin-2-ylmethyl ester,
- g) 3,5-Dimethyl-benzoic acid N'-[3-(2-amino-ethyl)-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl]-N-tert-butyl-hydrazide,
- h) 7-[N'-tert-Butyl-N'-(3,5-dimethyl-benzoyl)-hydrazinocarbonyl]-8-methyl-2,3-dihydro-benzo[1,4]dioxine-2-carboxylic acid pentafluorophenyl ester,
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o) 3,5-Dimethyl-benzoic acid N-tert-butyl-N'-(3-methanesulfonylmethyl-5-methyl-2,3-dihydro-benzo[1,4]dioxine-6-carbonyl)-hydrazide,  
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t) 3,5-Dimethoxy-4-methyl-benzoic acid N-(1-tert-butyl-heptyl)-N'-(4-ethyl-benzoyl)-hydrazide,  
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w) 3,5-Dimethyl-benzoic acid N-(1-tert-butyl-2-cyano-vinyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide,  
x) 3,5-Dimethyl-benzoic acid N-(1-butyl-2,2-dimethyl-pentyl)-N'-(3-methoxy-2-methyl-benzoyl)-hydrazide, and  
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